

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

FAN et al.

Serial No. 09/779,202

Filed: February 7, 2001

For: NUCLEIC ACID DETECTION  
METHODS USING UNIVERSAL  
PRIMING

Examiner: NOT YET ASSIGNED

Group Art Unit: 1645

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Dated: 6/16/01

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Christine P. Peters

INFORMATION DISCLOSURE STATEMENT AND  
STATEMENT OF RELATEDNESS

Assistant Commissioner  
for Patents  
Washington, DC 20231

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicant wishes to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO-1449. Copies of the documents are enclosed herewith.

With respect to patent applications, the applicants point out their duty under M.P.E.P. §2001.06(b) to disclose relevant patent applications of which they are aware. To this end, the applicants draw the Examiner's attention to the following patent applications:

1. U.S.S.N. 08/944,850, filed October 6, 1997; U.S.S.N. 09/287,573, filed April 6, 1999.

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2. U.S.S.N. 08/818,199, filed March 24, 1997, now Patent No. 6,023,540; U.S.S.N. 09/151,877, filed September 11, 1998; U.S.S.N. 09/786,896, filed September 10, 1999; U.S.S.N. 09/450,829, filed November 29, 1999; U.S.S.N. 09/816,651, filed March 23, 2001; U.S.S.N. 09/840,012, filed April 20, 2001.

3. United States Serial Number 09/189,543, filed November 10, 1998; U.S.S.N. 09/344,526, filed June 24, 1999; U.S.S.N. 09/748,706, December 22, 2000.

4. U.S.S.N. 09/256,943, filed February 24, 1999; U.S.S.N. 09/473,904, filed December 28, 1999; U.S.S.N. 09/606,369, filed June 28, 2000.

5. U.S.S.N. 09/553,993, filed April 20, 2000; U.S.S.N. 09/556,463, filed April 21, 2000.

6. U.S.S.N. 09/425,633, filed October 22, 1999; U.S.S.N. 09/535,854, filed March 27, 2000.

7. U.S.S.N. 09/517,945, filed March 3, 2000.

8. U.S.S.N. 09/513,362, filed February 25, 2000.

None of the foregoing references are believed to disclose the invention as claimed. Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

This Information Disclosure Statement is being filed within three months of the filing date of a national application, within three months of the date of entry of a national stage, or

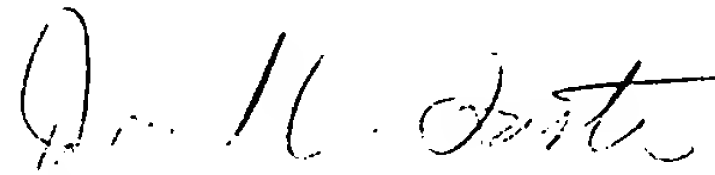
Serial No.: 09/779,202  
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before the mailing date of a first Office Action on the merits. 37 C.F.R. § 1.97(b), and therefore no fee is required. The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1300 (Our Order No. A-69850-1/DJB/RMS/DCF).

Respectfully submitted,

FLEHR, HOHBACH, TEST,  
ALBRITTON & HERBERT

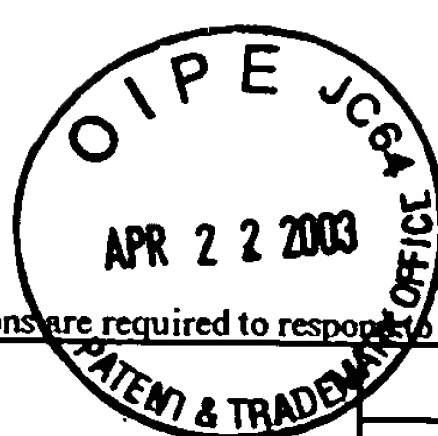
Dated: May 31, 2001



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1053428

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				Application Number	09/779,202
				Filing Date	February 07, 2001
				First Named Inventor	JIAN-BING FAN et al.
				Group Art Unit	1645
				Examiner Name	NOT YET ASSIGNED
Sheet	1	of	6	Attorney Docket Number	A-69850-1/DJB/RMS/DCF

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
✓	1	4,200,110		Peterson et al.	4/1980	
✓	2	4,499,052		Fulwyler	2/1985	
✓	3	4,682,895		Costello	7/1987	
✓	4	4,785,814		Kane	11/1988	
✓	5	4,822,746		Walt	4/1989	
✓	6	4,824,789		Yafuso et al.	4/1989	
✓	7	4,999,306		Yafuso et al.	3/1991	
✓	8	5,002,867		Macevicz	3/1991	
✓	9	5,028,545		Soini	7/1991	
✓	10	5,105,305		Betzig et al.	4/1992	
✓	11	5,114,864		Walt	5/1992	
✓	12	5,132,242		Cheung	7/1992	
✓	13	5,143,853		Walt	9/1992	
✓	14	5,194,300		Cheung	3/1993	
✓	15	5,244,636		Walt et al.	9/1993	

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
✓	16	EP	0 269 764			6/1988		
✓	17	EP	0 392 546			10/1990		
✓	18	EP	0 478 319			4/1992		
✓	19	EP	0 723 146			7/1996		
✓	20	WO	89/11101			11/1989		
✓	21	WO	93/02360			2/1993		
✓	22	WO	96/03212			2/1996		
✓	23	WO	97/14028			4/1997		
✓	24	WO	97/14928			4/1997		
✓	25	WO	97/40385			10/1997		
✓	26	WO	98/40726			9/1998		

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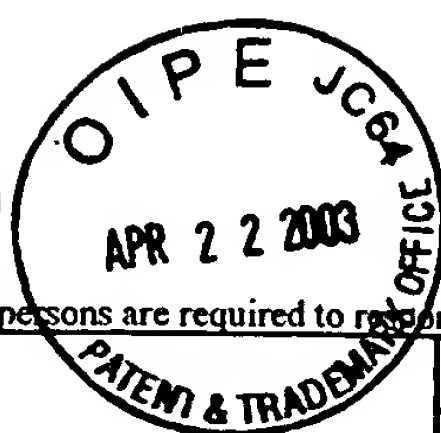
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✓	27	5,244,813		Walt et al.	9/1993	
✓	28	5,250,264		Walt et al.	10/1993	
✓	29	5,252,494		Walt	10/1993	
✓	30	5,254,477		Walt	10/1993	
✓	31	5,298,741		Walt et al.	3/1994	
✓	32	5,302,509		Cheeseman	4/1994	
✓	33	5,320,814		Walt et al.	6/1994	
✓	34	5,357,590		Auracher	10/1994	
✓	35	5,380,489		Sutton et al.	1/1995	
✓	36	5,435,724		Goodman et al.	7/1995	
✓	37	5,474,895		Ishii et al.	12/1995	
✓	38	5,481,629		Tabuchi	1/1996	
✓	39	5,494,798		Gerdt et al.	2/1996	
✓	40	5,496,997		Pope	3/1996	
✓	41	5,512,490		Walt et al.	4/1996	
✓	42	5,516,635		Ekins et al.	5/1996	
✓	43	5,565,324		Still et al.	10/1996	

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
✓	44	WO	98/50782			11/1998		
✓	45	WO	98/53093			11/1998		
✓	46	WO	98/53300			11/1998		
✓	47	WO	99/18434			4/1999		
✓	48	WO	99/60170			11/1999		
✓	49	WO	99/67414			12/1999		
✓	50	WO	99/67641			12/1999		
✓	51	WO	00/04372			1/2000		
✓	52	WO	00/13004			3/2000		

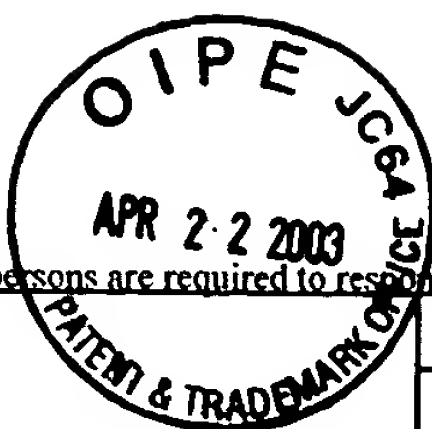
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✓	53	5,573,909		Singer et al.	11/1996	
✓	54	5,575,849		Honda et al.	11/1996	
✓	55	5,633,972		Walt et al.	5/1997	
✓	56	5,639,603		Dower et al.	6/1997	
✓	57	5,656,241		Seifert et al.	8/1997	
✓	58	5,690,894		Pinkel et al.	11/1997	
✓	59	5,814,524		Walt	10/1998	
✓	60	5,840,256		Demers et al.	11/1998	
✓	61	5,854,684		Stabile et al.	12/1998	
✓	62	5,863,708		Zanzucchi et al.	1/1999	
✓	63	5,888,723		Sutton et al.	3/1999	
✓	64	5,900,481		Lough et al.	5/1999	
✓	65	6,023,540		Walt et al.	2/2000	
✓	66	5,679,524		Nikiforov et al.	10/1997	
✓	67	5,856,083		Chelsky et al.	01/1999	
✓	68	5,858,732		Solomon et al.	01/1999	

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
✓	69	WO	00/16101			3/2000		
✓	70	WO	00/39587			7/2000		
✓	71	WO	00/47996			8/2000		
✓	72	WO	00/48000			9/2000		
✓	73	WO	00/63437			10/2000		
✓	74	WO	00/71243			11/2000		
✓	75	WO	00/71995			11/2000		
✓	76	WO	00/75373			12/2000		

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✓	77	6,013,456		Akgavan-Tafti	01/2000	
	78	6,051,380		Sosnowski et al.	04/2000	
✓	79	6,110,678		Weisburg et al.	08/2000	
✓	80	6,172,218	B1	Brenner	01/2001	
✓	81	6,083,763		Balch	07/2000	
✓	82	5,854,033		Lizardi	12/1998	
✓	83	5,554,516		Kacian et al.	09/1996	
✓	84	5,541,311		Dahlberg et al.	07/1996	
✓	85	5,660,988		Duck et al.	08/1997	

FOREIGN PATENT DOCUMENTS								
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✓	86	WO	98/13523		Pyrose Quencing AB	04/1998		

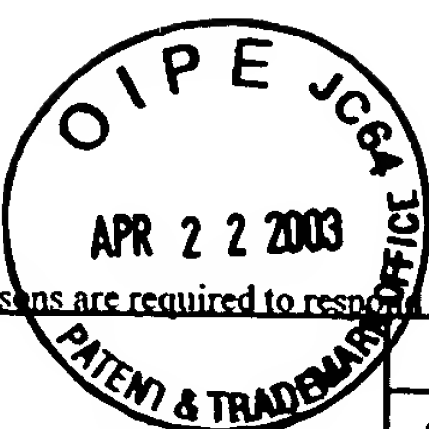
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	87	Abel et al., "Fiber-Optic Evanescent Wave Biosensor for the Detection of Oligonucleotides," Anal. Chem. 68:2905-2912 (1996).	
	88	Anonymous, "Microsphere Selection Guide," Bandg Laboratories, (Fisher, In) September 1998.	
	89	Anonymous, "Fluorescent Microspheres," Tech. Note 19, Bang Laboratories, (Fishers, In) February 1997.	
	90	Bangs, L.B., "Immunological Applications of Microspheres," The Latex Course, Bangs Laboratories (Carmel, IN) April 1996.	
	91	Barnard et al., "A Fibre-Optic Chemical Sensor with Discrete Sensing Sites," Nature, 353:338-340 (September 1991).	
	92	Chen et al., "A Microsphere-Based Assay for Multiplexed Single Nucleotide Polymorphism Analysis Using Single Base Chain Extension," Genome Research, 10(4):549-557 (2000).	
	93	Czarnik, "Illuminating the SNP Genomic Code," Modern Drug Discovery, 1(2): 49-55 (1998).	
	94	Drmanac, R. et al., "Sequencing by Oligonucleotide Hybridization: A Promising Framework in Decoding of the Genome Program," The First International Conference on Electrophoresis, Supercomputing and the Human Genome, Proceeding os th April 10-13, 1990 Conference at Florida State University. Ed. C. Cantor and H. Lim.	
	95	Drmanac, R. et al., "Prospects for a Miniaturized, Simplified and Frugal Human Genome Project," Scientia Yugoslavica, 16(1-2):97-107 (1990).	
	96	Drmanac, R. et al., "Sequencing by Hybridization (SBH) with Oligonucleotide Probes as an Integral Approach for the Analysis of Complex Genomes," International Journal of Genome Research, 1(1):59-79 (1992).	
	97	Drmanac, R. et al., "Sequencing by Hybridization," Automated DNA Sequencing and Analysis, ed. M. Adams, C. Fields and J. Venter. (1994).	
	98	Ferguson et al., "A Fiber-Optic DNA Biosensor Microarray for the Analysis of Gene Expression," Nature Biotechnology, 14:1681-1684 (1996).	
	99	Fuh et al., "Single Fibre Optic Fluorescence pH Probe," Analyst, 112:1159-1163 (1987).	
	101	Healey et al., "Improved Fiber-Optic Chemical Sensor for Penicillin," Anal. Chem. 67(24):4471-4476 (1995).	
	102	Healey et al., "Development of a Penicillin Biosensor Using a Single Optical Imaging Fiber," SPIE Proc. 2388:568-573 (1995).	
	103	Healey et al., "Fiberoptic DNA Sensor Array Capable of Detecting Point Mutations," Analytical Biochemistry, 251:270-279 (1997).	
	104	Hirschfeld et al., "Laser-Fiber-Optic "Optrode" for Real Time In Vivo Blood Carbon Dioxide Level Monitoring," Journal of Lightwave Technology, LT-5(7):1027-1033 (1987).	
	105	Iannone et al., "Multiplexed Single Nucleotide Polymorphism Genotyping by Oligonucleotide Ligation and Flow Cytometry," Cytometry, 39:131-140 (2000).	

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**Complete if Known**

<b>Application Number</b>	09/779,202
<b>Filing Date</b>	February 07, 2001
<b>First Named Inventor</b>	JIAN-BING FAN et al.
<b>Group Art Unit</b>	1645
<b>Examiner Name</b>	NOT YET ASSIGNED
<b>Attorney Docket Number</b>	A-69850-1/DJB/RMS/DCF

*(use as many sheets as necessary)*

Sheet	6	of	6
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**Examiner  
Signature**

Date Considered

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English Language Translation is attached.

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STATEMENT BY APPLICANT**

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Sh	1	of	3	Application Number	09/779,202
				Filing Date	February 07, 2001
				First Named Inventor	FAN et al.
				Group Art Unit	1645
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	A-69850-1/DJB/RMS/DCF

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	3	5,632,957		Heller et al.	05/1997	
/	4	5,763,175		Brenner	06/1998	
/	5	5,780,231		Brenner	07/1998	
/	6	5,795,714		Cantor et al.	08/1998	
/	7	5,830,711		Barany et al.	11/1998	
/	8	5,976,797		Mitsubishi	11/1999	
/	9	6,027,889		Barany et al.	02/2000	
/	10	6,054,564		Barany et al.	04/2000	
/	11	6,096,496		Frankel	08/2000	

**FOREIGN PATENT DOCUMENTS**

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/	12	WO	93/25563	A1	City of Hope	12/1993		
/	13	WO	94/02515	A1	Bunsen Rush Laboratories Inc.	02/1994		
/	14	WO	95/21271	A1	Molecular Tool Inc.	08/1995		
/	15	WO	95/16918	A1	Combichem Inc.	06/1995		
/	16	WO	96/15271	A1	Abbott Laboratories	05/1996		
/	17	WO	96/30392	A1	Ciba-Geigy AG	10/1996		
/	18	WO	97/31256	A2	Cornell Research Foundation, Inc.	08/1997		
/	19	WO	97/45559	A1	Cornell Research Foundation, Inc.	12/1997		

Examiner Signature		Date Considered	
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

2

of

3

Application Number

09/779,202

Filing Date

February 07, 2001

First Named Inventor

FAN et al.

Group Art Unit

1645

Examiner Name

Not Yet Assigned

Attorney Docket  
Number

A-69850-1/DJB/RMS/DCF

## U.S. PATENT DOCUMENTS

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/	23	6,284,465	B1	Wolber	09/2001	

## FOREIGN PATENT DOCUMENTS

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/	25	WO	98/04746	A1	Mount Sinai School of Medicine of the City University of New York	02/1998		
/	26	WO	98/13523	A1	Pyrose-Quencing AB	04/1998		
/	27	WO	98/31836	A1	Hyseq Inc.	07/1998		
/	28	WO	99/39001	A2	Amersham Pharmacia Biotech	08/1999		
/	29	WO	99/64867	A1	Amersham Pharmacia Biotech	12/1999		
/	30	WO	00/58516	A2	whitehead Institute for Biomedical Research	10/2000		
/	31	WO	00/71992	A1	Illumina Inc.	11/2000		

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Date

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of

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**Complete if Known**

Application Number

09/779,202

**Filing Date**

February 07, 2001

**First Named Inventor**

FAN et al.

### Group Art Unit

1645

**Examiner Name**

**Not Yet Assigned**

**Attorney Docket  
Number**

A-69850-1/DJB/RMS/DCF

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

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Signature**

Date  
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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***Complete if Known***

Application Number	09/779,202	AUG 21 2001
Filing Date	February 07, 2001	
First Named Inventor	FAN et al.	TECH CENTER 16007
Group Art Unit	1645	
Examiner Name	Not Yet Assigned	FRANK LL
Attorney Docket Number	A-69850-1/DJB/RMS/DCF	

## U.S. PATENT DOCUMENTS

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—	5	5,780,231		Brenner	07/1998	
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—	8	5,976,797		Mitsuhashi	11/1999	
—	9	6,027,889		Barany et al.	02/2000	
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V —	11	6,096,496		Frankel	08/2000	

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Date Considered

12/9/2002

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 2

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Application Number	09/779,202
Filing Date	February 07, 2001
First Named Inventor	FAN et al.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-69850-1/DJB/RMS/DCF

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	30	WO	00/58516	A2	whitehead Institute for Biomedical Research	10/2000		
	31	WO	00/71992	A1	Illumina Inc.	11/2000		

Examiner Signature	<i>[Signature]</i>	Date Considered	12/9/2002
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Application Number	09/779,202
Filing Date	February 07, 2001

AUG 21 2002

Filing Date	February 07, 2001
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First Named Inventor	FAN et al.	TECH CENTER 1600
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Group Art Unit	1645	TECH CENTER 1600/12
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Examiner Name	Not Yet Assigned
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Attorney Docket Number	A-69850-1/DJB/RMS/DCF
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**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

[illegible]

Examiner Signature	<i>[Signature]</i>	Date Considered	12/9/2002
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